

## Palisades

### 2Q/2003 Plant Inspection Findings

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#### Initiating Events

**Significance:**  Jun 30, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

##### **Incorrect Potential Transformer Fuses Removed**

A finding was self-revealed when work order instructions were not followed and incorrect potential transformer fuses were removed on safety-related 2400-Volt Bus 1D with the plant in Mode 6 (Refueling). Removal of the incorrect fuses caused a loss of service air to the steam generator nozzle dams and resulted in primary coolant system leakage past the nozzle dams. The primary cause of this finding was related to the cross-cutting area of human performance. This finding was more than minor because if left uncorrected it would become a more significant safety concern. The finding was of very low safety significance because the event did not result in an inadvertent change in primary coolant system temperature or a significant loss of refueling cavity level. One Non-Cited Violation of Technical Specification 5.4.1 was identified.

Inspection Report# : [2003004\(pdf\)](#)

**Significance:**  Apr 04, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

##### **Failure to Follow Operating Procedures**

A finding of very low safety significance was self-revealed during an event when an operator failed to adhere to a procedure for operating the chemical volume control system and repeatedly attempted to close a charging pump breaker after the breaker tripped. In addition, the operator failed to trip primary coolant pumps before primary coolant system pressure dropped below the minimum pressure for primary coolant pump operation. The primary cause of this finding was related to the cross-cutting area of Human Performance. The finding was more than minor because it could be reasonably viewed as a precursor to a significant event. The repeated operation of an electrical breaker contrary to procedural requirements was a contributing cause to the March 18, 2003, cable spreading room fire. The finding was determined to be of low safety significance because the failure to follow the procedure did not result in a loss of shutdown cooling or loss of reactor inventory. This issue was determined to be a Non-Cited Violation of Technical Specification 5.4.1, which required the implementation of written procedures covering the chemical volume control system and the reactor coolant system.

Inspection Report# : [2003005\(pdf\)](#)

**Significance:**  Apr 04, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

##### **Failure to Have Adequate Maintenance Procedures**

A finding of very low safety significance was self-revealed during an event when the licensee failed to have adequate maintenance procedures in place to ensure that when an electrical breaker was removed to be refurbished, that the arc chutes were reinstalled before the breaker was placed back in service. The finding was more than minor because it

could be reasonably viewed as a precursor to a significant event since a fire resulted in the P-55A charging pump breaker when the arc chutes were not reinstalled after the breaker had been refurbished. The finding was determined to be of low safety significance because the failure to follow the procedure did not result in a loss of shutdown cooling or loss of reactor inventory. This issue was determined to be a Non-Cited Violation of 10 CFR 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings."

Inspection Report# : [2003005\(pdf\)](#)

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**Significance:** Dec 28, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

**Failure to Rigorously Evaluate Industry Operating Experience Information which Resulted in Inadequate Preventive Maintenance Activities being Developed for the 345 KV Transmission Lines**

The inspectors determined that a self-revealed Green finding was associated with a Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," for the failure to rigorously evaluate industry operating experience information which resulted in inadequate preventive maintenance activities being developed for the 345 Kilo-Volt (KV) transmission lines that connect the plant and the switchyard. Consequently, on December 1, 2002, a connector holding a static wire on the 345 KV transmission line towers between the plant and the switchyard failed. As a result, the static line contacted one phase of the 345 KV lines as well as all three phases of the 345 KV Rear Bus in the switchyard which caused an automatic plant trip on loss of generator load and a loss of startup power. This self-revealed finding was determined to be of very low safety significance by the significance determination process because: (1) the finding did not contribute to the likelihood of a Primary or Secondary system Loss of Coolant Accident initiator; (2) the finding did not contribute to both the likelihood of a reactor trip and the likelihood that mitigation equipment or functions would not be available; and (3) the finding did not increase the likelihood of a fire or internal/external flood.

Inspection Report# : [2002009\(pdf\)](#)

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## Mitigating Systems

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**Significance:** Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

**Inadequate Corrective Actions to Address Scaffolding Control Problems**

The inspectors identified a finding for the failure to implement adequate corrective actions to prevent recurrence of issues associated with the construction of seismic scaffolding near safety-related systems. This finding was more than minor because if left uncorrected it would become a more significant safety concern in that inadequately constructed scaffold could affect the availability of mitigating systems during a seismic event. The finding was of very low safety significance because the finding did not screen as potentially risk significant due to a seismic initiating event and did not involve the total loss of any safety function that contributes to core damage accident sequences initiated by seismic events. The inspectors also determined that this finding represented continued human performance deficiencies in the construction of seismic scaffolding near safety-related systems. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XVI, "Corrective Action," was identified.

Inspection Report# : [2003002\(pdf\)](#)

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**Significance:** Dec 28, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

**Failure to Adequately Evaluate the Root Cause of a Leak in 1992 on the Instrument Line for Safety Injection Tank T-82D**

The inspectors determined that a self-revealed Green finding was associated with a Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," for the failure to adequately evaluate the root cause in 1992 of a leak that occurred on the instrument line for Safety Injection Tank T-82D. Consequently, past corrective actions were not adequate to prevent the leak from recurring on November 11, 2002. As a result, T-82D was rendered inoperable and unavailable to perform the intended safety function of injecting borated water to the reactor during a large break loss of coolant accident. In addition, a NOED had to be issued to extend Technical Specification Limiting Condition 3.5.1, "Safety Injection Tanks," allowed outage time by 24 hours so that repairs could be completed to restore T-82D to an operable status without having to shut down the plant. This self-revealed finding was determined to be of very low safety significance by the significance determination process because: (1) the safety injection tanks were only credited for large break loss of coolant accidents; and (2) the exposure time for the inoperable safety injection tank was less than 3 days.

Inspection Report# : [2002009\(pdf\)](#)



**Significance:** Nov 22, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to adequately implement procedural requirements for the control of scaffolding in the vicinity of safety-related equipment, contrary to the requirements of TS 5.4.1, "Procedures."**

The inspectors identified a finding of very low safety significance that is being treated as a Non-Cited Violation of Technical Specification 5.4.1 "Procedures." The licensee failed to adequately implement scaffold control requirements contained in procedure MSM-M-43, "Scaffolding." Seismic scaffolding erected over Component Cooling Water (CCW) pump P-52A was anchored to a safety related pipe support for CCW pump P-52B without engineering evaluation and approval. The finding was greater than minor because the finding would become a more significant concern if left uncorrected. The failure of scaffolding installed in the vicinity of safety-related equipment during a seismic event could result in damage to mitigating equipment. The finding was of very low safety significance because it did not result in the actual loss of the safety function of the train or system.

Inspection Report# : [2002010\(pdf\)](#)



**Significance:** Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Ensure the Inspection and Maintenance of the Safety-Related Expansion Joints Utilized as Flood and High Energy Line Break Barriers**

The inspectors identified a Green Finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion V, "Instructions, Procedures, and Drawings," for the failure to ensure activities affecting quality were prescribed by documented procedures of a type appropriate to the circumstances. Specifically, the activities affecting quality dealt with the inspection and maintenance of the safety-related expansion joints utilized as flood and high energy line break barriers between the component cooling water and west engineered safeguards rooms. This issue was more than minor because if left uncorrected the safety-related expansion joints could degrade further, undetected, which could result in an inadequate flood and high energy line break barrier between the component cooling water and the west engineered safeguards rooms. The finding was determined to be a licensee performance deficiency of very low safety significance (Green) by the significance determination process because the finding: (1) was not a design or qualification deficiency; (2) did not represent an actual loss of safety function of a system; (3) did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time; (4) did not

represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.

Inspection Report# : [2002007\(pdf\)](#)



**Significance:** Sep 30, 2002

Identified By: NRC

Item Type: NCV NonCited Violation

**Failure to Promptly Identify and Correct Conditions Adverse to Quality Regarding Flood Door-196A**

The inspectors identified a Green finding that is being treated as a Non-Cited Violation of 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Actions," for the failure to promptly identify and correct conditions adverse to quality regarding Flood Door-196A which protected the safety-related equipment in the component cooling water room from a flood in the turbine building. This issue was more than minor because the licensee failed to take adequate corrective actions for a previously identified issue involving the degradation of Flood Door 196A which could potentially cause a flood in the turbine building to spread to the component cooling water room. The finding was determined to be a licensee performance deficiency of very low safety significance (Green) by the significance determination process because the finding: (1) was not a design or qualification deficiency; (2) did not represent an actual loss of safety function of a system; (3) did not represent an actual loss of a safety function of a single train for greater than Technical Specification outage time; (4) did not represent an actual loss of a safety function of one or more Non-Technical Specification trains of equipment; and (5) did not screen as potentially risk significant due to a seismic, flooding, or severe weather initiating event.

Inspection Report# : [2002007\(pdf\)](#)

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## Barrier Integrity



**Significance:** Mar 31, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

**Inadequate Testing of the Fueling Handling Area Ventilation System**

The inspectors identified a finding for the failure to ensure that testing of the fuel handling area ventilation system was performed in accordance with test procedures which incorporated the appropriate requirements and acceptance limits specified in Technical Specification 5.5.10, "Ventilation Filter Testing Program." This finding was more than minor because if left uncorrected it would become a more significant safety concern in that the radiological barrier function provided by the fuel handling area ventilation system was degraded and was not being tested adequately. The finding was of very low safety significance because the finding represented a degradation of only the radiological barrier function provided for the spent fuel pool. The inspectors also determined that this finding was a result of human performance deficiencies related to developing and implementing the Technical Specification surveillance. A Non-Cited Violation of 10 CFR 50, Appendix B, Criterion XI, "Test Control," was identified.

Inspection Report# : [2003002\(pdf\)](#)



**Significance:** Mar 31, 2003

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

**Failure to Restore an Inoperable Channel of Hydrogen Monitoring**

The inspectors determined that a self-revealed finding was associated with the failure to restore an inoperable channel

of containment hydrogen monitoring within the allowed outage times specified in Technical Specification Action Statements 3.3.7.A and 3.3.7.D. The finding was more than minor because the barrier integrity cornerstone objective to provide reasonable assurance that physical design barriers protect the public from radionuclide releases caused by accidents or events was affected. The finding was determined to be of very low safety significance after a Region III Senior Reactor Analyst, in conjunction with the inspectors, performed a SDP Phase 3 assessment. Utilizing NUREG-1675, "Basis Document for Large Early Release Frequency Significance Determination Process," the analyst determined that the significance threshold for large early release frequency of 100 volume percent per day leak rate from containment would not be exceeded. The inspectors also noted that this finding was attributable to a latent human performance deficiency which occurred during the April 2001 refueling outage, but was self-revealed in December 2002. A Non-Cited Violation of Technical Specification Section 3.3.7 was identified.

Inspection Report# : [2003002\(pdf\)](#)

**Significance:**  Dec 28, 2002

Identified By: Self Disclosing

Item Type: NCV NonCited Violation

### **Failure to Promptly Identify and Correct Problems Regarding the Operation of Mechanical Equipment Room Door-16**

The inspectors determined that a self-revealed Green finding was associated with a Non-Cited Violation of 10 CFR 50 Appendix B, Criterion XVI, "Corrective Action," for the failure to promptly identify and correct problems regarding the operation of Mechanical Equipment Room Door-16, which resulted in the door failing in the open position of October 10, 2002. This self-revealed finding was determined to be of very low safety significance by the significance determination process because the finding represented a degradation of only the radiological barrier function for the control room.

Inspection Report# : [2002009\(pdf\)](#)

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## **Emergency Preparedness**

**Significance:**  Feb 07, 2003

Identified By: NRC

Item Type: NCV NonCited Violation

### **Failure to Critique Per 10 CFR 50.47 (b)(14) Two Instances in the First Quarter of 2002 as being Unsuccessful Drill and Exercise Performance (DEP) Indicator Data to NRC.**

A finding of very low safety significance was identified. The finding was due to an inadequate critique of two DEP indicator opportunities that occurred during licensed operator training sessions in the first quarter of 2002. The licensee's critique process failed to identify that the completed emergency notification forms to simulated State and county officials were not marked to indicate whether the notification was associated with a drill or an actual emergency in accordance with regulatory guidance, NEI 99-02, Regulatory Assessment Performance Indicator Guideline, regarding the accuracy of such notifications. The critique failure was considered to be greater than minor because it involved the DEP indicator's value exceeding the threshold between the licensee response (Green) band and the regulatory response (White) band. The critique failure also affected the Emergency Response Organization Performance attribute of the Emergency Preparedness Cornerstone. Since the critique failure was in not identifying that the two notification forms were not marked to indicate whether the notification was associated with a drill or an actual emergency, rather than a risk significant topic (i.e., an incorrect emergency classification, an incorrect protective action recommendation, or an untimely notification), the critique failure is a finding of very low safety significance (Green). Because of the very low safety significance of the finding and because the licensee addressed the finding in its

corrective action program, this violation of 10 CFR 50.47(b)(14) is being treated as a Non-Cited Violation.  
Inspection Report# : [2003003\(pdf\)](#)

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## Occupational Radiation Safety

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## Public Radiation Safety

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## Physical Protection

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## Miscellaneous

**Significance:** N/A Nov 22, 2002

Identified By: NRC

Item Type: FIN Finding

### **Summary Conclusion PI & R Inspection**

In general, the plant identified issues and entered them into the corrective action process at an appropriate low-level, although some exceptions to this practice were identified. Nuclear Oversight assessment reports identified issues for the plant to resolve, including issues with corrective action follow through. The majority of issues reviewed were properly categorized and evaluated although some evaluations were narrowly focused, particularly for apparent cause evaluations and extent of condition reviews. Most corrective actions reviewed were appropriately implemented; however, some examples, including one inspection finding, were identified regarding corrective actions that were not fully implemented or fully effective in correcting the identified problem. Corrective action follow-through and effectiveness is one aspect of the corrective action process that could be strengthened to reduce repeat issues at the plant.

Inspection Report# : [2002010\(pdf\)](#)

Last modified : September 04, 2003